

No. 14-1646

IN THE
United States Court of Appeals
FOR THE FEDERAL CIRCUIT

TRANSWEB, LLC,

Plaintiff – Appellee,

v.

3M INNOVATIVE PROPERTIES COMPANY AND 3M COMPANY,

Defendants – Appellants

*On Appeal from the United States District Court
for the District of New Jersey in Case No. 10-cv-04413, Judge Faith S. Hochberg*

APPELLEE’S ANSWERING BRIEF

Sanford I. Weisburst
QUINN EMANUEL URQUHART
& SULLIVAN, LLP
51 Madison Ave., 22nd Floor
New York, NY 10010
(212) 849-7000

Philip C. Sternhell
QUINN EMANUEL URQUHART
& SULLIVAN, LLP
777 Sixth St., NW, 11th Floor
Washington, DC 20001-3706
(202) 538-8000

Michael E. Williams
Harold A. Barza
Valerie Roddy
QUINN EMANUEL URQUHART
& SULLIVAN, LLP
865 South Figueroa St., 10th
Floor
Los Angeles, CA 90017
(213) 443-3000

Attorneys for Appellee TransWeb, LLC
January 29, 2015

CERTIFICATE OF INTEREST

Counsel for Plaintiff-Appellee TransWeb, LLC, certifies the following:

1. The full name of every party represented by me is: TransWeb, LLC (“TransWeb”).
2. TransWeb is named in the caption and is the real party in interest.
3. TransWeb’s parent company is CLARCOR Inc., a publicly held corporation (NYSE: CLC). No other publicly-held corporation owns 10% or more of TransWeb’s membership interests.
4. The following law firms/attorneys have appeared (and/or are expected to appear) in the court below and/or in this Court on behalf of TransWeb:

Quinn Emanuel Urquhart & Sullivan, LLP: Michael E. Williams, Harold Barza, Sanford I. Weisburst, Valerie Roddy, Adam Wolfson, Philip Sternhell, Jason Lake, Anna Ison, Matthew Warren, Valerie Lozano, Jon Cederberg, Scott Florance, Liza Brereton.

Connell Foley, LLP: Christine I. Gannon, Liza Walsh, Jessica Palmer.

DATED: January 29, 2015

QUINN EMANUEL URQUHART &
SULLIVAN, LLP

By: /s/ Michael E. Williams

Michael E. Williams
*Attorneys for Plaintiff-Appellee
TransWeb, LLC*

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STATEMENT OF RELATED CASES

No appeal from this civil action has previously been before this Court or any other appellate court. There is no case pending in this Court or any other court that will directly affect, or be directly affected by, this Court's decision in this appeal, or that is related to this dispute.

INTRODUCTION

3M's brief proceeds as if this Court were a forum for arguing the facts in the first instance. It is not. After an 11-day trial involving 13 witnesses and 163 exhibits, the jury¹ and District Judge Faith Hochberg² found that 3M had engaged in a deliberate scheme to defraud the U.S. Patent & Trademark Office ("PTO") into believing that 3M's proposed patents on filter material for respirators were patentable over the prior art. The jury further found that 3M's plan was to use these patents to eliminate TransWeb (the only non-3M supplier of such filter material) from the market, after which 3M would enjoy a monopoly in the downstream market for respirators.

Specifically, the jury and district court found that, in 1996-97, TransWeb, a small New Jersey company, commercialized a filter material named "T-Melt P." No later than 1998, 3M's inventor Dr. Marvin Jones and patent prosecutor Karl

¹ In a unanimous verdict for TransWeb on its *Walker Process* antitrust claim and its invalidity defense to 3M's patent infringement claims, and a unanimous advisory verdict for TransWeb on its inequitable conduct defense.

² In a bench ruling for TransWeb on its inequitable conduct defense.

Hanson learned about public use of T-Melt P that, if disclosed to the PTO, would have condemned 3M's patent application on similar filter material. Rather than disclose T-Melt P promptly, Jones and Hanson manufactured a false record and used it to argue to the PTO's Examiner that T-Melt P had *not* been publicly available at the relevant time. The stratagem worked, and the PTO issued the patents to 3M.

The jury's and district court's findings deserve substantial deference. That deference certainly cannot be overcome by 3M's one-sided factual presentation that unfairly diminishes many of the bases for the jury's and district court's findings. For example, TransWeb founder Kumar Ogale testified that he publicly handed out samples of T-Melt P at an April 1997 Expo in Minnesota attended by 3M employees including Jones. Ogale's testimony was corroborated by abundant evidence, including an Expo brochure describing the products that TransWeb would be displaying and a physical exhibit produced from 3M's own files that resembled the samples Ogale described having distributed at the Expo. Additionally, Jones lacked credibility when he testified that he had been unaware of T-Melt P during the Expo. As the district court found, but 3M ignores,

[Jones'] testimony about his experience at the Expo (and other areas of his testimony) was simply not credible, particularly in light of the emails, exhibits, and his hostile, evasive, and sometimes flippant or arrogant demeanor. In short, his demeanor was one of a witness trying to distance himself from any knowledge of TransWeb's presence and activities at the Expo.

A21. Additionally, although 3M attempts to discredit Ogale's well-corroborated testimony regarding the Expo as "newly-minted," Br. 3, then-Magistrate Judge (now-Third Circuit judge) Patty Shwartz, the district court, and the jury all considered that same argument and rejected it.

Considering the full trial record, with appropriate deference to the jury's and district court's findings, this Court should affirm the judgment. The jury and district court had ample basis in the evidence to find that 3M's inventor and patent prosecutor committed inequitable conduct by intentionally misleading the PTO's Examiner into issuing 3M's patents; that 3M's patents are invalid as obvious; and that 3M's subsequent patent-infringement suit against TransWeb, had it succeeded, would have conferred monopoly power on 3M.

COUNTERSTATEMENT OF ISSUES PRESENTED

1. Were the jury and district court entitled to find that TransWeb's T-Melt P was prior art to 3M's asserted patents, based on evidence including (a) a TransWeb witness's testimony that he had publicly distributed T-Melt P at the Expo and elsewhere and offered it for sale; (b) contemporaneous documentary and physical evidence corroborating that testimony; and (c) the incredible testimony of a 3M inventor denying that he had seen T-Melt P at the Expo?

2. Did the district court act within its discretion in ruling that 3M's asserted patents are unenforceable due to inequitable conduct, based on its findings

that 3M's inventor and patent prosecutor failed to disclose, and affirmatively misrepresented, information that led the PTO to conclude that an otherwise but-for material reference was not prior art?

3. Did the district court correctly deny 3M's JMOL motion to overturn the jury's verdict for TransWeb on its antitrust claim under *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1965)?

a. Was the jury entitled to find that 3M had asserted fraudulently-obtained patents against TransWeb, based on the same evidence that supported the district court's inequitable conduct finding?

b. Was the jury entitled to find, as to liability, that 3M's scheme, if successful, would have created a dangerous probability that 3M could exert monopoly power in one or more relevant markets?

c. Was the jury entitled to find, as to damages, that TransWeb's attorneys' fees in defending 3M's patent infringement claims flowed directly from 3M's anticompetitive conduct?

4. Did the district court correctly deny 3M's JMOL motion to overturn the jury's verdict that 3M's asserted patent claims were invalid as obvious in light of the combination of T-Melt P and a 3M hydrocharging patent?

5. Did the district court correctly deny 3M's JMOL motion regarding infringement as moot, and act within its discretion in denying a new trial?

COUNTERSTATEMENT OF THE CASE

A. Oil-Resistant And Oil-Proof Filter Material For Respirators

Respirators protect workers from inhaling dangerous substances. A1096-97. The key component of a respirator is the filter. A filter may block particulates passively, or it may be electrostatically charged into an “electret” so that its fibers affirmatively attract and capture particulates. A1100. Charging the fibers increases the percentage of particulates that are blocked by a filter without adding material that would make it harder to breathe through (the harder the respirator is to breathe through, the higher the “pressure drop”). A1100-04.

Oily substances may dissipate the charge, however. A1106. In 1995, the National Institute of Occupational Safety and Health (NIOSH) implemented standards (fully effective in July 1998) for respirators used in oily environments. A1106-08. Under these standards, respirators are certified as oil-proof (P), oil-resistant (R), or not oil-resistant (N), and as 95%, 99%, or 100% efficient. A1106-07.³

B. TransWeb Develops T-Melt P In Late 1996

Kumar Ogale, a chemical engineer, founded TransWeb as a small start-up in October 1996 to develop specialty filtration products. A1152-53; A1158-59.

³ Oil-proof and oil-resistant respirators are collectively called “P&R respirators.” A1107-08.

Ogale soon learned that respirator manufacturers needed a filter material that would meet the new NIOSH regulations. A1160.

Using his prior experience with fluoropolymers and plasma fluorination, Ogale developed a method of creating highly breathable, oil-resistant filter material. A1153-57; A1160-62. *First*, he melted polypropylene pellets and extruded that substance to create a meltblown web. *Second*, he treated the web with fluorine-containing gas in a plasma chamber to make it oil-resistant. *Finally*, he electrostatically charged the web to make it an electret. A1181-83.

Excited by test results showing that the fluorinated electret did not decay as much as non-fluorinated electrets in oily environments, A1164-65, in December 1996, Ogale sent samples to respirator manufacturers—including Mine Safety Appliances (“MSA”) in the United States and Racal Filter Technologies (“Racal”) in Canada—to inquire if they found the product effective. A1165-71; A5193; A6869; A6871-74. On January 9, 1997, MSA confirmed Ogale’s results. A1169-70; A6870.

On April 30, 1997, Ogale filed a patent application on the plasma-fluorinated electret and its manufacturing method. A1187; A5297-5318. Although Ogale ultimately abandoned the application after the PTO’s Examiner issued a final rejection on obviousness grounds, A1192-93; A5361-66, TransWeb

continued making this material in various weights under the “T-Melt” trade name, A1193; A1199-1200.

C. TransWeb Publicly Distributes T-Melt P At The April 1997 Expo

In April 1997, at the same time TransWeb’s Ogale filed his patent application, TransWeb participated in the American Filtration & Separation Society Exposition (“Expo”), in 3M’s hometown of Minneapolis, Minnesota. A1195-98; A6877-80. TransWeb’s booth displayed a plaque reading “Oil Resistant Filter Media for P100” because TransWeb wanted potential customers to know it had developed an oil-resistant material meeting the new NIOSH standards. A1195; A1198-1200; A1206-07. At the Expo, Ogale distributed “T-Melt 30P” and “T-Melt 50P”⁴ in sample packs containing data sheets explaining the filtration properties. A1197-1206; A10887-90. In this litigation, 3M produced a T-Melt 30P sample pack (with data sheet) from the files of a former Racal employee named Pierre Legare. A1201-02; A10887-90. Ogale testified that this pack was similar to those he had distributed at the Expo. A1201-02. As the district court explained, “the jury could well have found that this sample pack[] was either picked up at the Expo or mailed to Legare immediately at the conclusion of the Minneapolis Expo ... or that [it] was picked up by Legare’s coworker, ... who attended the Expo[] where Ogale was handing out these samples....” A13-14.

⁴ The number indicates the weight; “P” indicates plasma fluorination. A1199.

D. TransWeb Sends Additional Samples To Racal In May 1997

When TransWeb's Ogale sent samples to Racal in December 1996, Legare requested more material for testing. A1211-12. On May 7, 1997, Ogale sent Legare "a significant amount of [T-Melt 30P and 50P], 20, 30 sheets of them each," cut from the same rolls of material that had yielded the Expo samples. A1211-13; A5154.

On June 2, 1997, Ogale and Legare met to discuss various TransWeb products, including T-Melt P. A1214-15. At the meeting, at Racal's request, TransWeb executed a confidentiality agreement. A1257; A1429; A1436-37; A2349-50; A9180-82. Ogale provided Legare the same data sheet he had included in the Expo sample packs, and told Legare that T-Melt P was surface-fluorinated and that he had filed a patent application. A1214-15. In February 1998, 3M acquired Racal, and Legare became a 3M employee. A2392-93.

E. TransWeb Successfully Commercializes T-Melt P

On July 1, 1997, TransWeb sent an offer for sale to a respirator manufacturer named Gerson, providing "real commercial prices" for T-Melt 30P, 40P, and 50P. A1218-23; A5150. TransWeb made its first sale of T-Melt P in August 1997 to a second respirator manufacturer, MSA, for evaluation and use in P95 and P100 respirators. A1223-25; A6933-36. The following month, on September 2, 1997, TransWeb made additional sales of T-Melt 50P to a third

respirator manufacturer, Willson, for use in a P95 respirator, which NIOSH certified on May 22, 1998. A1249-53; A7358-59.

F. 3M Closely Monitors TransWeb's Debut

Even before the Expo, 3M closely monitored TransWeb and its products. An internal 3M email sent on April 22, 1997 copied a press release about TransWeb from the April 1997 issue of *Nonwoven Industry* and alerted the recipients to TransWeb's participation in the upcoming Expo and TransWeb's development of a filter material named "T-Melt." A6859-60; A6875-76. The email also designated two 3M employees—Doug Sundet and Curt Christensen—to collect samples and information from TransWeb at the Expo "[i]n an effort not to overwhelm Transweb with inquiries from 3M...." A6860. On April 29, 1997, the day the Expo began, Jones and his colleague Dr. Alan Rousseau received this email from their supervisor at 3M with the note "FYI." A6859.

At trial, Jones denied recalling whether he had visited or even seen TransWeb's Expo booth. A1542; A1553. But Jones was able to recount in exacting detail a demonstration and two lectures at the Expo. A1542-44; A1719-20. Moreover, even though Jones has spent "upwards of 80 percent" of his time on respirators, A1510, and even though his supervisor had forwarded him the email described above, A6859, Jones testified that TransWeb's booth "wouldn't have interested [him]." A1542; A1553-54. Jones also wavered between suggesting that

he had visited the booth adjacent to TransWeb's and denying that he had done so. A1551-54. The district court ultimately found that Jones lacked credibility in denying knowledge of TransWeb's activities at the Expo. *See* A21 (quoted *supra*, at 2).

In June 1997, 3M invited TransWeb's Ogale to 3M to make a presentation about TransWeb's products. A1271-73. At trial, Jones denied attending that presentation or ever meeting Ogale. A1782; A1560. However, Jones' testimony was contradicted by 3M's own documents and witnesses. A11047-49 (May 27, 1997 email to Jones from his boss stating "fyi relevant to your transweb meeting"); A1890-91 (3M witness testifying that Jones told him he met Ogale around 1997).

In December 1997, Jones and Rousseau received an internal 3M email recounting that "TransWeb ... has developed a meltblown nonwoven filter media product *treated for respirator use in oil laden environments.*" A6941-42 (emphasis added).⁵ Jones testified that he had "no idea" whether he had seen this email and, notwithstanding his work in this field, claimed that, if he had read it, "[i]t was nothing that would have meant anything to [him]." A1604.

G. 3M Files The Asserted Patents' Parent Application

In 1997, 3M had a patent on making oil-proof and oil-resistant filters using a meltblown additive called "PFOS." A1568; A1520-23; A1605. But in 1998—the

⁵ References to oil resistance or suitability for oil-laden environments indicate the plasma-fluorinated T-Melt P product. A1384.

year the NIOSH regulations took full effect—3M alerted the Environmental Protection Agency to potential environmental issues with PFOS and subsequently discontinued its use. A1010-11. 3M suddenly needed plasma fluorination as a replacement technology and, to maintain its P&R respirator market share, 3M needed patents protecting that plasma fluorination technology. Although 3M had been experimenting with plasma fluorination since 1984, *see* A5116; A6868, 3M rushed to file a patent application covering plasma-fluorinated electret. A2540.

On July 2, 1998, 3M filed the patent application that would ultimately issue as U.S. Patent No. 6,432,175, covering plasma-fluorinated electrets. A5001. The patents 3M asserted in this case—U.S. Patent Nos. 6,397,458 (manufacturing method), A221-34, and 6,808,551 (usage method), A235-47—are, respectively, a division and continuation of that application, making the critical date July 2, 1997 (one year before the parent patent application was filed). A221; A235. Many of the claims in 3M’s initial patent application claimed the same process that TransWeb’s Ogale had developed to make T-Melt P, and the same results that T-Melt P had achieved. A8908; A2065-70.

H. 3M’s Inventor And Patent Prosecutor Realize That T-Melt P Is Invalidating Prior Art To 3M’s Patent Application

As recounted above, based on its close monitoring of TransWeb, 3M knew that plasma fluorination of electrets either was, or soon would be, unpatentable over the prior art even as 3M’s inventor Jones and the other named inventors

rushed to file 3M's patent application on plasma-fluorinated electrets. In the summer of 1998, ex-Racal and now-3M employee Legare informed Jones and Rousseau that TransWeb had developed a plasma-fluorinated material in 1997, A2393-99; the jury could have found that Legare also told them that Ogale had filed a related patent application.

By the end of 1998, Jones and Hanson realized (if they were not already aware) that T-Melt P was invalidating prior art to the application they had filed. On November 18, 1998, Legare sent Jones samples of T-Melt 30P and 50P that TransWeb had provided to Racal in 1997, describing them as "charged polypro[pylene] BMF [meltblown] with fluoropolymer treatment." A5115. Jones had these samples analyzed by 3M's lab, which confirmed T-Melt 30P was surface-fluorinated. A6943; A9178; A9183. Jones and Rousseau received these results on December 2, 1998. A6943.

The results also confirmed that T-Melt P was in NIOSH-certified respirators already in the marketplace. By November 11, 1998, 3M had obtained and tested a Willson P95 respirator and determined that it used plasma-fluorinated filter material. A6944-45; A1650. The email to Jones and others transmitting the lab's analysis of the T-Melt 30P sample noted that "[t]he sample [of T-Melt 30P] appears quite similar to the Willson P-95 sample." A6943. Less than two hours after Jones, Rousseau, and 3M's John Huberty received the lab's analysis of the T-

Melt 30P sample, Huberty sent Jones the analysis of the Willson P95 respirator. A6943-45.

Then, on December 27, 1998, Rousseau forwarded the April 22, 1997 email about TransWeb's participation in the Expo and its T-Melt product to Jones, Huberty, and Hanson, stating: "Found this while cleaning out old notes. Notice that *at this time* there was no mention of oil-resistant electret filter web." A6859 (emphasis added); *cf.* A6941-42. As the district court found, "[t]he inference is clear that Rousseau realized that the TransWeb products at the Expo and in the *Nonwovens Industry* [in April 1997] were likely the same products 3M had just analyzed and found in the Willson respirator." A25.

I. 3M's Inventor And Patent Prosecutor Manufacture A Record For The PTO

Within two months of Rousseau's email, Hanson and Jones began laying the groundwork for a fraud on the PTO that would induce the PTO to issue 3M's patents. Specifically, they manufactured a revisionist history in which T-Melt P was *not* publicly available in 1997, when in fact it was (as the jury could have found in reaching its verdict for TransWeb, and as the district court expressly found). They manufactured this false record in three steps:

First, in early 1999, under the pretext that 3M was interested in purchasing TransWeb's plasma-fluorinated filter material, 3M procurement manager Gary Kurtzahn informed Ogale that 3M wanted to obtain product samples from

TransWeb, but that 3M needed a confidentiality agreement in place first. A1274-75. 3M sent Ogale a confidentiality agreement, which Ogale signed. *Id.*; A5029.

Second, on March 15, 1999, Kurtzahn, at the direction of Jones, Hanson, and Rousseau, sent Ogale a list of specific samples 3M wanted. A1276-78; A5488-89; A10886. Ogale sent the samples. A1279-81.

Third, on April 28, 1999, Hanson wrote a letter to Ogale primarily concerning the samples that Ogale had just provided in March 1999, but Hanson also inserted unrelated language regarding the samples Ogale had provided to Legare at Racal years earlier. A6952-53. Specifically, Hanson sought to tie those earlier samples to the Racal-TransWeb confidentiality agreement (even though, as the district court found, A30, Ogale had provided Racal with those samples *before* the June 2, 1997 confidentiality agreement):

In early 1998, 3M completed the purchase of the assets of a number of Racal companies The purchase ... involved the assignment of various contracts to 3M, including *a confidential nondisclosure agreement dated June 2, 1997 between Transweb, LLC and Racal Filter Technologies, Inc. As part of that agreement, samples were sent to Racal Filter Technologies for their evaluation.* We are returning those samples to you with this letter because 3M presently does not have an interest in them in view of the new samples that you have recently provided us. 3M also would like to terminate the June 2, 1997 agreement with Transweb ... 3M does not consider the samples submitted with your March 26 letter to be submitted under the June 2 agreement but only under the more recent agreement dated February 24, 1999 between 3M and Transweb and Mr. Kurtzahn's March 15, 1999 letter to you.

A6952 (emphasis added). Ogale countersigned the letter, understanding it to clarify only that the March 1999 samples he had just sent to 3M were covered by 3M's confidentiality agreement, and to terminate the June 2, 1997 agreement with Racal. A1283-85.⁶

Ogale's understanding was reasonable: As the district court found, Hanson's letter "was most easily understood by a businessman as confirming the 1999 confidentiality agreement [with 3M]," and, although Hanson and 3M "continually quote only the oddly intermixed lines as an 'admission' by Ogale that the 1997 samples were given to Legare on June 2, 1997," "[n]o reasonable patent examiner, juror, or judge could find that 3M's selective quotation and proposed interpretation of the letter makes much sense to lawyers, let alone lay businessmen." A26-27. Rather, the court concluded, Hanson wrote this set-up letter, "ostensibly about the 1999 confidentiality agreement, as a pretext to get a purported 'admission' [from TransWeb's Ogale] about the timing of the earlier TransWeb-Racal interaction," A27, that Hanson would later use to deceive the PTO into believing that prior samples of T-Melt P were provided under cover of a confidentiality agreement and not publicly disclosed.

⁶ Although no samples were actually enclosed, Ogale did not contact Hanson to request their return because he had no reason to do so. A1285-87.

J. In Late 2000, 3M's Patent Prosecutor Finally Discloses T-Melt P To The PTO

Hanson did not immediately disclose T-Melt P or the above-described set-up letter to the PTO. Rather, even after receiving Rousseau's December 27, 1998 email connecting T-Melt P with the Expo, Hanson filed no less than five Information Disclosure Statements ("IDSs") and had an in-person interview with the Examiner without making any mention of T-Melt P. A9025-27; A9138; A9065-66; A9093-94; A9139-40; A9156-57.

Meanwhile, 3M continued to closely monitor TransWeb. In April 2000, 3M invited Ogale for another meeting at 3M, at which Ogale again provided 3M with detailed information regarding TransWeb's products, and 3M questioned Ogale regarding how long TransWeb had been in business. A1289-90; A10885. An internal 3M email described as a "follow-up note" to that meeting instructed 3M employees, including Rousseau and Legare, to "**Minimize direct contact with TransWeb.... Minimize written exchanges. Maximize verbal exchange of info.**" A10885 (emphasis in original). And in July 2000, 3M sought to eliminate its prior-art problem by attempting—unsuccessfully—to acquire TransWeb. A1290-92.

On July 31, 2000, the Examiner—still unaware of T-Melt P, which 3M had not disclosed—allowed 3M's pending patent application. A9165. Three months later, Hanson finally disclosed T-Melt P, reopening the prosecution the day the

issue fee was due to do so, in an attempt to inoculate 3M's patent against a future challenge. A9174-76. Specifically, on November 1, 2000, almost two years after Jones received the lab's analysis of T-Melt 30P and Jones and Hanson connected T-Melt P to the Expo, Hanson filed a new IDS disclosing T-Melt 30P and attaching (1) the June 1997 Racal-TransWeb confidentiality agreement; (2) 3M's lab analysis of T-Melt 30P; and (3) Hanson's April 28, 1999 set-up letter to Ogale. A9177-85. In this IDS, Hanson stated:

On June 2, 1997, Racal ... entered into a Confidential Disclosure Agreement (Exhibit A) with Transweb, LLC. As part of this arrangement between the parties, Transweb furnished to Racal a sample of a nonwoven filtration web. The web was accompanied by a product sheet that outlined the filtration properties of a product designated as Tmelt 30P (Exhibit B).

In early 1998, 3M acquired the assets of Racal As part of the purchase of Racal's assets, 3M obtained possession of the Transweb product that was submitted under the Confidential Disclosure Agreement dated June 2, 1997....

Although 3M acquired Racal prior to the filing date of the present application, neither the Transweb Tmelt 30P product, nor the product sheet, was shown or otherwise known to the inventors named in this patent application, or the undersigned, before the July 2, 1998 filing date of this patent application. The product is no longer in 3M's possession. It was returned to Transweb along with a letter dated April 28, 1999 (Exhibit C). The applicants are unaware of any public disclosure of the Tmelt 30P product before the July 2, 1998 filing date. Applicants do believe, however, that the product may have been subsequently commercialized by Transweb. No patent applications are believed to have been filed by Transweb for this product.

A9178-79.

K. The PTO's Examiner Allows 3M's Patent Claims Based Solely On Its Patent Prosecutor's Misrepresentations That T-Melt P Was Not Prior Art

Despite Hanson's efforts to portray T-Melt P as confidential in the IDS, the Examiner initially treated T-Melt 30P as prior art and rejected all still-pending claims of 3M's patent application, finding them "unpatentable over TW [T-Melt 30P] in view of [U.S. Patent No. 5,496,507]."⁷ A5014-17. In response, under Hanson's direction, 3M's outside counsel Allison Johnson used the set-up letter to persuade the Examiner that there had been no invalidating public disclosure of T-Melt 30P. A9194-96. Specifically, Johnson argued only that T-Melt 30P was not prior art because the T-Melt 30P sample that Racal had received from TransWeb had been provided pursuant to the Racal-TransWeb confidentiality agreement:

[The T-Melt 30P reference] was disclosed to [Racal] by [TransWeb] under a Confidential Non-Disclosure Agreement ("the Agreement") The Agreement expressly states that the information disclosed by [TransWeb] to [Racal] pursuant to the Agreement is trade secret information The Agreement expressly prohibits the disclosure of information covered by the Agreement to a third party [The T-Melt 30P reference] does not evidence public knowledge or public use and does not qualify as prior art 35 U.S.C. § 102(a) ... [or] 35 U.S.C. § 102(b) ... Indeed, rather than constitute a publication, the Agreement provides clear evidence of concealment by the parties, particularly when the information was transmitted confidentially and was explicitly characterized as being a "trade secret."

⁷ 3M's '507 patent covers "hydrocharging," *i.e.*, "contacting an article with water in a manner sufficient to impart a charge to the article, followed by drying the article." A227; A289; A5070.

A9194-96.⁸

The Examiner allowed the claims “[i]n light of applicants’ arguments filed on May 14, 2001” A5024; A2026-27. The ‘175 and ‘458 patents issued in 2002, followed by the ‘551 patent in 2004.

L. 3M Waits Eight Years To Sue TransWeb

Although 3M had been analyzing samples of T-Melt P since 1998, 3M did not sue TransWeb when the ‘458 patent issued in 2002. Rather, it continued to interact with TransWeb, even purchasing filter material from TransWeb. A1292. In December 2007, 3M requested additional T-Melt P samples, which TransWeb provided. A1293-96. Still 3M did not sue.

In 2008, 3M, which manufactures both filter material for respirators *and* the actual respirators, experienced a downturn in respirator sales. A2135-40. Referring to three of 3M’s competitors in the manufacture of respirators (all supplied with filter material by TransWeb), an internal 3M presentation noted that 3M “need[s] to ‘change the playing field.’” A2145-46; A5407; A1225; A1314. Because TransWeb was then and remains now the only producer (besides 3M) of plasma-fluorinated polymeric filter material, A1315; A2131, by eliminating TransWeb, 3M could eliminate all of its competition in the high-performance P&R

⁸ Johnson did not contest that T-Melt P (*if* it was prior art), combined with the ‘507 patent, required rejection of 3M’s application. A9194-96; A2025.

respirator market. A1315; A2166. Thus, in May 2008, 3M again attempted to purchase TransWeb, but TransWeb rejected the offer. A1297-99; A5543-44.

Finally, in 2010, 3M sued TransWeb for infringement in the District of Minnesota. A1302-04; A1308. A fifty-employee company at its peak before the lawsuit, A1160, TransWeb lacked the resources to litigate against the giant 3M (a point 3M stressed). A7015. But rather than simply cave as 3M expected, TransWeb sold itself to CLARCOR, Inc., a customer that relied on TransWeb for plasma-fluorinated filter material and was willing to fund TransWeb's defense. A1311-13. After TransWeb challenged personal jurisdiction, 3M voluntarily dismissed its suit, and TransWeb filed a declaratory-judgment action against 3M in the District of New Jersey. A2 n.1.

M. Trial And Jury Verdict For TransWeb On Its *Walker Process* Claim And Invalidity And Non-Infringement Defenses

Three days before trial, 3M dismissed 55 of the 57 claims it had originally asserted, leaving only claims 31 and 57 of the '458 patent to be tried. A20415-18.⁹

After 11 days of trial, the jury returned a unanimous verdict finding that claims 31 and 57 of the '458 patent are obvious, that TransWeb did not infringe either claim, and that 3M violated the antitrust laws (*Walker Process*) by asserting

⁹ In dropping all but those claims, 3M attempted to transform its case into one about "hydrocharging"; unlike the withdrawn claims, which were directly anticipated by T-Melt P, claim 31 expressly requires hydrocharging, and the metrics required by claim 57 can be obtained by hydrocharging plasma-fluorinated web. A2072-79.

fraudulently-obtained patents against TransWeb in an anticompetitive manner. A217-20.¹⁰ The jury found that TransWeb was entitled to damages in the amount of \$34,412 in lost profits, plus its attorneys' fees in defending the patent infringement claims, which the jury found attributable to 3M's antitrust violations and which, by stipulation of the parties, were calculated by a Special Master. A6; A219; A306-07. After poring over TransWeb's attorneys' invoices, reviewing extensive briefing, and conducting a ten-hour oral argument, the Special Master (retired federal district judge Alfred Wolin) determined TransWeb's fee-based award to total \$26,146,493.45. A42-43; A314-57. This amount equaled (1) TransWeb's legal fees for defending 3M's 57 asserted patent claims (\$7,657,023.49), which, as antitrust damages, were trebled (\$22,971,070.48); and (2) TransWeb's costs of suit in pursuing its antitrust claim (\$3,175,422.97), to which it was entitled as the prevailing party, on a 1:1 basis. A42; A50-51; 15 U.S.C. § 15.

At 3M's request, the inequitable conduct issue was submitted to the jury for an advisory verdict. A2705. The jury unanimously found 3M's asserted patents unenforceable for inequitable conduct. A218.

¹⁰ The jury found against TransWeb on its sham-litigation antitrust claim. A219.

N. The District Court’s Inequitable Conduct Determination

Following post-trial briefing and argument, the district court issued its own determination in favor of TransWeb on its inequitable conduct defense. A16-34. After “review[ing] the record in exhaustive detail,” the court found that “the evidence of the inequitable conduct by Hanson and Jones is clear and convincing,” and “the actions of other 3M employees—Rousseau, Legare, ... and others—provide strong corroborating evidence of the inequitable conduct of Jones and Hanson.” A34 (footnote omitted). Specifically, “the evidence ... [wa]s powerful that there were multiple sources of prior art known to Hanson, Jones, Rousseau, and others at 3M, and that no confidentiality agreement took that art out of the ‘public’ realm,” yet “[t]his entire category of prior art ... was knowingly omitted from the patent application materials and Supplemental Disclosure because, if the Examiner knew about it, the patent would be rejected without any possible rebuttal argument about confidentiality.” A33. The district court also found that Hanson and Jones made affirmative misrepresentations to the Examiner, and that “[t]he only reasonable inference is that Hanson and Jones knew [their statements] were not true.” A32.

SUMMARY OF ARGUMENT

I

Ample evidence supported the jury's and district court's finding that T-Melt P was prior art to 3M's asserted patents. 3M's main argument on appeal is that the testimony of TransWeb founder Ogale that he distributed T-Melt P at the 1997 Expo lacked corroboration. To the contrary, contemporaneous documents and a physical exhibit, as well as testimony by a 3M witness (Jones), more than adequately corroborate Ogale's testimony that T-Melt P was in public use and on sale before the critical date.

Specifically, among the contemporaneous documents corroborating Ogale's testimony were an Expo brochure stating that TransWeb would be displaying T-Melt polypropylene; documents reflecting Ogale's pre-critical date distribution of samples to potential customers; a pre-critical date offer for sale; the patent application Ogale filed during the Expo; internal 3M emails confirming TransWeb's activities at the Expo; and a sample from 3M's own files, produced in litigation, that was nearly identical to the samples Ogale described distributing at the Expo. And 3M entirely ignores that Jones' incredible testimony regarding whether he saw TransWeb's booth also corroborates Ogale's testimony: If Jones had not seen TransWeb distributing T-Melt P samples at the Expo, why else would he have gone to such lengths—including offering testimony that the district court

found “not credible” and “hard to watch,” A21—to deny any recollection of TransWeb’s participation in the Expo?

Reviewing all of this evidence, the jury and district court were entitled to find that it corroborated Ogale’s testimony that he and TransWeb had distributed T-Melt P to the public before the critical date of July 2, 1997.

II

The district court acted within its discretion in finding 3M’s asserted patents unenforceable because of the inequitable conduct of 3M inventor Jones and patent prosecutor Hanson. Whether T-Melt P was in public use before the critical date was indisputably but-for material to the allowance of the asserted patent claims: The Examiner initially rejected the claims as unpatentable in light of T-Melt P, and changed his mind based solely on 3M’s misrepresentations that T-Melt P was not public, and thus was not prior art, because the T-Melt P samples supposedly had been provided by TransWeb under a confidentiality agreement.

Nor did the district court clearly err in finding that Hanson and Jones acted with knowledge and intent to deceive the PTO. In attacking the court’s finding, 3M discusses only selective and incomplete portions of the evidence. A review of all of the evidence in context, however, reveals a pattern of conduct amounting to an intentional breach of their duty of candor to the PTO. Importantly, even if these 3M employees did not know at the time of the 1997 Expo or when they filed their

patent application that T-Melt P was publicly available, they subsequently (by no later than December 1998) learned that T-Melt P had been publicly available before July 1997, yet failed to disclose that information to the PTO. Worse, they manufactured a false record to mislead the Examiner. The evidence of these conscious and deliberate acts, combined with these witnesses' lack of credibility, entitled the district court to find that the only reasonable inference was that Hanson and Jones had committed inequitable conduct.

III

Regarding TransWeb's *Walker Process* claim, there was likewise sufficient evidence to support the jury's verdict that 3M obtained the asserted patents only by committing an intentional fraud on the PTO. 3M's challenges to that finding should be rejected for the reasons discussed above.

3M's argument on market definition, another highly-factual issue, lacks merit because the jury could have found that fluorinated polymeric filter material is a distinct relevant product market, and that the relevant geographic market for P&R respirators is the United States. And 3M's argument that TransWeb cannot recover the legal fees it incurred in defending 3M's infringement claims rests on an erroneous conflation of antitrust *injury* and antitrust *damages*. TransWeb proved the former because 3M's infringement suit, if successful, would have conferred monopoly power on 3M in both the upstream market for fluorinated polymeric

filter material and the downstream market for high-efficiency P&R respirators. Having done so, TransWeb was entitled to recover the harm that it uniquely suffered from 3M's attempt: the fees and expenses TransWeb incurred in defending against 3M's anticompetitive infringement suit.

IV

If this Court affirms the district court's finding that 3M's patents are unenforceable for inequitable conduct, this Court need not address 3M's challenge to the jury's obviousness finding because inequitable conduct and obviousness are independent defenses to enforcement. In any event, the jury had ample basis to find 3M's patent claims obvious in light of T-Melt P and the '507 patent. As with many of its other arguments, 3M omits or improperly discounts important evidence supporting the verdict. In fact, substantial evidence—including expert testimony and the Examiner's own conclusion that the asserted claims were obvious in light of T-Melt P and the hydrocharging patent—supported the jury's conclusion that the asserted claims were invalid.

V

Because 3M has established no basis for disturbing the district court's and the jury's findings of inequitable conduct and invalidity, its JMOL motion on infringement is moot. Likewise, in light of the overwhelming evidence supporting

those findings and the judgment, the district court did not abuse its discretion in denying 3M's motion for a new trial.

ARGUMENT

I. THE JURY AND DISTRICT COURT WERE ENTITLED TO FIND THAT SUBSTANTIAL EVIDENCE AND TESTIMONY CORROBORATED THE TESTIMONY OF TRANSWEB'S OGALE THAT T-MELT P WAS PRIOR ART

3M contends (Br. 1, 23-24, 29-40) that the district court's inequitable conduct determination and the jury's verdict on the *Walker Process* claim and invalidity defense must be reversed because they depend on a finding that T-Melt P was prior art, a finding that 3M claims is supported only by the uncorroborated testimony of TransWeb's Ogale. 3M's argument rests on a fundamental misunderstanding of the corroboration standard as requiring independent corroboration of every material fact by a single source, and on an incomplete and incorrect account of the evidence presented at trial. Applying the correct test, and considering the full record, ample evidence allowed the jury and district court to find Ogale's testimony sufficiently corroborated.

A. Standard Of Review

In reviewing a jury verdict, this Court "accept[s] the factual findings, presumed from a favorable jury verdict, which are supported under the substantial evidence/reasonable juror standard." *Newell Cos. v. Kenney Mfg. Co.*, 864 F.2d 757, 765 (Fed. Cir. 1988). Whether testimony regarding prior art is sufficiently

corroborated by documentary, physical, or testimonial evidence is evaluated under a “rule of reason” standard, which involves “an assessment of the totality of the circumstances including an evaluation of all pertinent evidence.” *Adenta GmbH v. OrthoArm, Inc.*, 501 F.3d 1364, 1372 (Fed. Cir. 2007); *see also Ohio Willow Wood Co. v. Alps S., LLC*, 735 F.3d 1333, 1348 (Fed. Cir. 2013) (similar). “Each corroboration case must be decided on its own facts with a view to deciding whether the evidence as a whole is persuasive.” *Sandt Tech., Ltd. v. Resco Metal & Plastics Corp.*, 264 F.3d 1344, 1350 (Fed. Cir. 2001) (internal quotation marks omitted). The sufficiency of corroborative evidence is a question of fact for the jury to decide. *Adenta*, 501 F.3d at 1371-72. In conducting this review, this Court “may not reassess, and indeed is incapable of reassessing, witness credibility....” *In re Rosuvastatin Calcium Patent Litig.*, 703 F.3d 511, 521 (Fed. Cir. 2012) (internal quotation marks omitted). The district court’s corroboration finding in connection with its inequitable conduct determination is reviewed for clear error. *Fleming v. Escort, Inc.*, --- F.3d ----, 2014 WL 7332614, *4 (Fed. Cir. Dec. 24, 2014).

Contrary to 3M’s argument below, A9, and insinuation on appeal (Br. 3, 16, 24, 31, 39), the corroboration requirement does not require *testimony* from another witness; *documentary* evidence suffices, and indeed is preferable to oral testimony. *Sandt Tech.*, 264 F.3d at 1351 (“In contrast to contemporaneous documentary

evidence, ... post-invention oral testimony is more suspect, as there is more of a risk that the witness may have a litigation-inspired motive to corroborate the inventor's testimony, and that the testimony may be inaccurate.”). Moreover, contrary to 3M's new suggestion on appeal (Br. 32), the law does “not impose an impossible standard of ‘independence’ on corroborative evidence by requiring that every point ... be corroborated by evidence having a source totally independent of the witness.” *Ohio Willow Wood*, 735 F.3d at 1346 (internal quotation marks and citations omitted); *see also Fleming*, 2014 WL 7332614, at *5.¹¹ The jury was carefully instructed regarding the corroboration requirement, A139-40, and 3M alleges no error in that regard.

B. The Testimony Of TransWeb's Ogale Was Amply Corroborated

Applying these standards, the jury and district court were entitled to find the corroboration requirement satisfied by the abundant documentary and other evidence confirming Ogale's testimony that he had distributed sample packs of T-Melt 30P and 50P at the April 1997 Expo,¹² provided samples of T-Melt P to

¹¹ Although TransWeb adduced ample corroborating evidence, 3M is in an especially poor position to demand *more* evidence when it waited eight years to sue TransWeb and offered no credible reason for the delay. A10 n.7.

¹² 3M attempts to discredit Ogale's testimony regarding the Expo as a post-discovery, eve-of-trial revelation that was not disclosed in “five rounds of invalidity contentions.” Br. 16, 31. (Notably, three of TransWeb's four amendments to its invalidity contentions were necessitated by 3M's amendments to its infringement contentions. A20821.) In any event, TransWeb consistently disclosed T-Melt P as prior art in its invalidity contentions, TransWeb questioned

potential customers in late 1996 and early 1997, and offered T-Melt P for sale prior to the critical date.

1. The Expo Brochure And Internal 3M Emails

The Expo brochure stated that TransWeb would display “T-Melt–Melt blown nonwovens polypropylene....” A6879. The jury and district court were entitled to reject 3M’s assertion (Br. 33) that this brochure refers only to “T-Melt” rather than “T-Melt P.” Although “T-Melt” was a brand name covering all of TransWeb’s high-performance filter materials—including both oil-resistant T-Melt P made of polypropylene and non-oil-resistant meltblown materials made of nylon or polyester, A1384—the Expo brochure specifically refers to the “*polypropylene*” product. A6879 (emphasis added); A1384. And it would have made little sense for a new supplier of specialty filter material like TransWeb to distribute samples of *untreated* polypropylene material at the Expo; as 3M noted in a 1994 patent, untreated “nonwoven fibrous filter webs ha[d] been made from polypropylene using melt-blowing apparatus” “[f]or many years” and “[s]uch melt-blown microfiber webs” were in “widespread use.” A5066-69. The brochure thus

Jones about the Expo several months before the close of discovery, and 3M questioned Ogale regarding the Expo at deposition. A20133-35. The Magistrate Judge thus rejected 3M’s arguments that the Expo was not sufficiently disclosed. A20955; A20963-66. The district court and jury also rejected this argument.

corroborates Ogale's testimony that TransWeb was distributing T-Melt P at the Expo, as the district court concluded. A11.

Internal 3M emails further confirm that TransWeb was promoting "T-Melt" at the Expo and distributing samples. A11048 (reporting on visit to TransWeb booth at Expo and noting emphasis on specialty meltblown "T-Melt" products and confirming 3M collected at least one TransWeb product sample); A6860 (discussing TransWeb's participation in Expo). As the district court noted, "[b]ased on 3M's own documents, it can scarcely be ingenuously claimed there is no corroboration for TransWeb's assertion that Ogale handed out samples of the product at the Expo." A11.¹³

2. T-Melt 30P Sample From 3M's Files ("PTX-1338")

During this litigation, 3M produced from its files a T-Melt P sample pack, labeled at trial as exhibit "PTX-1338," that closely matched Ogale's description of the sample packs of T-Melt P that he had distributed at the Expo and shortly afterward. A10887-90. In deciding 3M's JMOL motion regarding invalidity, the district court observed that a reasonable jury could conclude that 3M's competing

¹³ Ogale's testimony was corroborated further by the filing of his patent application on April 30, 1997, during the Expo. A5297-5376. Although such a filing does not by itself confirm public use, it bolsters Ogale's testimony that TransWeb had already developed this technology, and it is consistent with Ogale's distribution of T-Melt P samples at the Expo insofar as Ogale was ready to disclose the invention to the public in exchange for a patent grant.

explanation was incorrect and not credible. The district court explained that then-Racal and later-3M employee Legare purportedly sent the samples TransWeb provided directly to him for testing, and the testing process would have left the sample material soiled, in contrast to the pristine PTX-1338. A13. Thus, the jury could have found that PTX-1338 was a sample obtained at the Expo (perhaps by another Racal employee, Suresh Kalatoor, who attended the Expo and worked with Legare, A6902)—and thus that this sample furnishes physical proof that T-Melt P was in the public domain before the critical date of July 2, 1997.

3M notes (Br. 36-37) that PTX-1338 has only two layers, when Ogale testified that the samples distributed at the Expo had at least six. As an initial matter, 3M waived this argument by failing to raise it below at trial or in post-trial motions. *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1315 (Fed. Cir. 2008). Waiver aside, the district court and jury could have reasonably concluded this difference has no significance; those layers could have been removed by anyone, for any purpose, at any time during the 15 years between the Expo and trial.¹⁴ Regardless whether PTX-1338 was collected at the Expo by Racal's Kalatoor or was shipped by Ogale to Legare after the Expo but before the June 1997 confidentiality agreement, PTX-1338 corroborates Ogale's testimony because this

¹⁴ Indeed, the record indicates that at least two layers were removed by 3M during litigation. A11041 (3M's counsel's description of PTX-1338 as "a physical sample comprised of four sheets of material").

sample—taken from 3M’s files—closely matches Ogale’s description of the samples he prepared and distributed. A13; *Lazare Kaplan Int’l, Inc. v. Photoscribe Techs., Inc.*, 628 F.3d 1359, 1375 (Fed. Cir. 2010) (“[D]espite being undated, the photograph ... and the video lend further credence to Gresser’s testimony, as they are consistent with his description of the machine and the other supporting documentary evidence presented....”).

3. The Incredible Testimony Of 3M’s Inventor

The jury also could have found, and the district court expressly found, that Jones’ incredible testimony regarding the Expo provided further corroboration for Ogale’s testimony that TransWeb distributed T-Melt P there. *See supra*, at 2; A21 (“[Jones’] demeanor was one of a witness trying to distance himself from any knowledge of TransWeb’s presence and activities at the Expo.”).¹⁵

4. Documents Concerning Non-Expo Public Uses Of T-Melt P

Finally, extensive evidence documented TransWeb’s distribution of samples of T-Melt P to several companies beyond the Expo before the critical date of July 2, 1997. *E.g.*, A5381 (transmittal letter to Filtration Group); A6869 (transmittal letter to MSA); A6870 (MSA’s response). 3M attempts to discount these

¹⁵ To be sure, Jones’ incredible account does not by itself establish that the contrary account is true. But it does “fortif[y]” the conclusions the jury and district court drew from the substantial other evidence of T-Melt P’s pre-critical date public use. *Leader Techs., Inc. v. Facebook, Inc.*, 678 F.3d 1300, 1307 (Fed. Cir. 2012).

documents as “referring to *T-Melt*, rather than T-Melt P; fail[ing] to corroborate what happened *at the Expo*...; or both,” Br. 38 (emphasis in original) (citations omitted), but these criticisms lack merit.

First, several documents confirm on their face that the samples were oil-resistant—and thus plasma-fluorinated, since non-plasma-fluorinated meltblown would decay in an oily environment. A6870 (MSA letter noting that samples “perform[] favorably against DOP,” an oil-resistance testing agent); A6869 (transmittal letter noting samples were “expected to have better performance in an oily environment”); A5150 (offer for sale to Gerson, referring to customer’s “initial test evaluations” and providing prices for T-Melt P).

Second, 3M’s argument (Br. 38) that these documents do not refer to the Expo ignores that TransWeb’s distribution of these samples publicly—*whether or not during the Expo*—qualify as “public use.” Although 3M argues (Br. 38-39) that subsequent confidentiality agreements entered into by TransWeb are “inconsistent” with these public uses, the jury and district court had ample basis to reject this argument, especially because 3M’s Hanson admitted that 3M itself sometimes requires confidentiality agreements before discussing products that are already publicly available. A1856. In any event, there was no evidence that these samples were provided pursuant to confidentiality agreements, and thus nothing to

counter Ogale's affirmative testimony that these samples were provided *without* confidentiality agreements. A1254-56.

* * * * *

In sum, the jury could have found, and the district court expressly found, that the above-described evidence amply corroborated all material aspects of Ogale's testimony that T-Melt P was prior art to the asserted patents. There is no basis to disturb those findings.¹⁶

II. THE DISTRICT COURT DID NOT ABUSE ITS DISCRETION IN FINDING 3M'S PATENTS UNENFORCEABLE DUE TO INEQUITABLE CONDUCT

A patent is unenforceable due to inequitable conduct if a person owing a duty of candor to the PTO, including a named inventor or patent prosecutor, withheld material information from the PTO or made material misrepresentations to the Examiner to deceive him to grant the patent. *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290-91 (Fed. Cir. 2011) (*en banc*). The district court acted within its discretion (and consistently with the jury's unanimous advisory verdict) in determining that 3M's Hanson and Jones committed inequitable conduct by misleading the Examiner to believe that T-Melt P was not in public use prior to the critical date.

¹⁶ 3M criticizes (Br. 31) TransWeb for failing to call as a witness a former TransWeb employee who attended the Expo. But such testimony was unnecessary given the extensive evidence discussed in text. *Sandt Tech.*, 264 F.3d at 1350-51.

A. Standard Of Review

This Court reviews a district court's inequitable conduct determination for abuse of discretion and its factual findings for clear error. *Am. Calcar, Inc. v. Am. Honda Motor Co.*, 768 F.3d 1185, 1189 (Fed. Cir. 2014). To establish inequitable conduct, "the accused infringer must prove by clear and convincing evidence that the applicant knew of the reference, knew that it was material, and made a deliberate decision to withhold it." *Therasense*, 649 F.3d at 1290. Although intent to deceive must be "the single most reasonable inference able to be drawn from the evidence," a court "may infer intent from indirect and circumstantial evidence" because "direct evidence of deceptive intent is rare." *Id.* (internal quotation marks omitted). As shown below, the district court acted within its discretion in finding these elements met here.

B. The District Court Was Entitled To Find That The Disclosure Of T-Melt P By 3M's Patent Prosecutor And Inventor Was Materially Misleading

When Hanson and Jones finally "disclosed" T-Melt P to the Examiner to create an *appearance* of candor, they did so misleadingly, concealing T-Melt's pre-critical date public use from the Examiner through a series of false statements, misleading half-truths, and omissions.¹⁷

¹⁷ The misrepresentations made in the '175 patent prosecution were incorporated by reference into the prosecution of the '458 and '551 patents. A2030-31. That the '175 patent claimed products, whereas the '458 and '551 patents claimed

First, Hanson represented to the Examiner that the only T-Melt 30P sample in 3M's possession as of the application's filing date (July 2, 1998) had been provided by TransWeb "[a]s part of" and "under" the June 1997 confidentiality agreement between TransWeb and Racal. A9178. As the district court found, even "3M's own lawyers did not believe" this account. A28; *compare* A2354 (Legare's trial testimony that he received PTX-1338 at his June 2, 1997 meeting with TransWeb), *with* A11041 (3M's counsel's statement that, "[a]fter investigating this issue, 3M has been unable to confirm when Mr. Legare obtained [PTX-1338]"). Indeed, there was ample evidence that TransWeb provided samples of plasma-fluorinated filter material to Racal in late 1996, and additional samples of both T-Melt 30P and 50P in May 1997, *before* TransWeb entered into any confidentiality agreement with Racal. A1211-13; A5154. The only item TransWeb provided to Racal at the June 2, 1997 meeting was a data sheet, not any samples, as reflected in notes Hanson obtained from Legare before filing the IDS. A5296 ("Confidentiality agreement signed for oily resistant media. Data sheet provided."); A15002-03 (same); A2382-85. Hanson amplified this

methods, is immaterial because a predicate finding to the jury's invalidity verdict was that a person of ordinary skill in the art could determine the method for making T-Melt P by analyzing the sample. This finding was supported by uncontradicted expert testimony and 3M's own analysis and evidence. A2088-92; A2401-02; A5030 (1999 letter from 3M to TransWeb stating 3M could "duplicate" TransWeb's product using samples in the marketplace).

misrepresentation when he directed outside counsel to argue—relying on these statements and Hanson’s April 28, 1999 set-up letter to Ogale—that T-Melt P was not prior art. A9194-96.

Second, other statements in the IDS were also calculated to conceal that T-Melt P was in public use prior to the critical date. Hanson stated that “[a]pplicants are unaware of any public disclosure of the T[M]elt 30P product before the July 2, 1998 filing date,” A9179, but did not disclose *any* of the evidence that he and Jones had amassed that TransWeb was publicly distributing T-Melt P well before that date. A2393-99; A6879; A6941-45; A6859; A11048. Hanson’s elaboration that the applicants “believe ... that [T-Melt P] *may* have been subsequently commercialized by Transweb” after 3M filed its patent application on July 2, 1998, A9179 (emphasis added), was also affirmatively misleading because Hanson and Jones did not disclose the Willson P95 respirator or the lab analysis showing that the filter material therein (in fact, T-Melt 50P) was “quite similar” to T-Melt 30P. A6943-45. Yet Hanson knew that the Willson P95 respirator, certified by NIOSH in May 1998 (a process that can take months), was on the market and available for testing by 3M no later than November 1998. A1249-53; A1644-46; A1650; A6944-45; A7358-59. And, to conceal further the public availability of T-Melt 50P, which was used in Willson’s P95 respirator certified by NIOSH in May 1998, Hanson also did not disclose the T-Melt 50P sample at all, even though it is

undisputed that Legare had sent it to Jones for testing in 1998, A5115, a but-for material omission in itself.

Finally, Hanson's representation that "[t]he product is no longer in 3M's possession" and was "returned to Transweb along with a letter dated April 28, 1999" was false, as confirmed by Ogale's testimony, A1285-87, and 3M's possession of PTX-1338 in its files. A12-14; A11041-46. This indisputably false statement provided a pretext for attaching Hanson's April 28, 1999 set-up letter to lend further support to his false claim that the T-Melt P sample was provided pursuant to the June 1997 confidentiality agreement.¹⁸

In sum, the inequitable conduct in this case is not simply a failure to disclose the Expo, as 3M suggests (Br. 42-50), but a well-planned and elaborate scheme to mislead the PTO.

C. The District Court Was Entitled To Find That 3M's Misleading Disclosure Was But-For Material To The Allowance Of 3M's Patents

"When an applicant fails to disclose prior art to the PTO, that prior art is but-for material if the PTO would not have allowed a claim had it been aware of the undisclosed prior art." *Therasense*, 649 F.3d at 1291. The Examiner initially

¹⁸ The statement that "[n]o patent applications are believed to have been filed by Transweb for this product," A9179, is also almost certainly false. Ogale testified that he told Legare in 1997 that he had applied for a patent on his plasma-fluorinated material, and Hanson interviewed Legare before submitting the IDS. A1215; A1964; A2383.

rejected all of the claims of the parent patent based on the combination of T-Melt P and the ‘507 hydrocharging patent. That the T-Melt 30P sample was purportedly confidential was the *only* argument 3M raised in response to the Examiner’s initial rejection; 3M made no attempt to argue that its invention was not obvious in light of T-Melt P in combination with the ‘507 patent. A9194-96. The Examiner then allowed the claims “[i]n light of applicants’ arguments.” A9199. Based on this same combination, the jury also concluded 3M’s claims were obvious, making T-Melt P but-for material. 3M’s only argument regarding “but-for” materiality is based on its contention that Ogale’s testimony regarding the public distribution of T-Melt P was not corroborated. That argument was refuted in Point I, *supra*.

D. The District Court Was Entitled To Find That 3M’s Patent Prosecutor And Inventor Acted With Intent To Deceive

First, even if Jones were to be believed that he did not see TransWeb’s distribution of T-Melt P at the Expo in April 1997,¹⁹ there was substantial evidence that both he and Hanson put the various pieces together, by December 1998 at the latest, to realize that TransWeb’s T-Melt P was in public use before the July 1997 critical date. In particular, Hanson and Jones knew that (1) TransWeb had plasma-fluorinated polypropylene meltblown electret material called T-Melt 30P and T-

¹⁹ The district court in fact found this testimony incredible. *See supra*, at 2, 9-10, 33; *infra*, at 42. 3M, citing Hanson’s and Jones’ testimony (*e.g.*, Br. 44-45), incorrectly suggests that the district court was required blindly to credit all of Hanson’s and Jones’ self-serving testimony, even if that testimony lacked credibility and was contradicted by substantial evidence.

Melt 50P, A5115; (2) TransWeb had participated in the April 1997 Expo where it was displaying “T-Melt—Melt blown nonwovens polypropylene” and distributing samples, A15913; A11047-48; (3) TransWeb had distributed samples of T-Melt P to Racal in the same 1997 period, A5115;²⁰ and (4) a NIOSH-certified respirator using material similar to T-Melt 30P was on the market as early as November 1998 and hence must have been on sale and in public use months before given the lengthy NIOSH-certification process. A1248-53; A1644-46.²¹ Further, Jones and Hanson unquestionably appreciated the importance of this information regarding whether it might constitute prior art condemning 3M’s patent application; otherwise, Hanson—the patent prosecutor—would not have been copied on Rousseau’s December 27, 1998 email connecting T-Melt 30P to the Expo. A6859-60; *Apotex Inc. v. UCB, Inc.*, 763 F.3d 1354, 1362 (Fed. Cir. 2014) (affirming inequitable conduct finding where inventor “knew, or at least had a strong suspicion, that he was seeking to patent the very same process used to obtain an already existing and widely available drug” and “was aware that some of the

²⁰ 3M’s arguments (Br. 46, 49) that samples shipped to Racal and post-critical date sales of T-Melt P to Willson were not invalidating, ignores the actual relevance of this evidence. In addition to its corroborative value, that Hanson and Jones knew Ogale sent Racal samples of T-Melt P soon after the Expo and that Willson had brought a NIOSH-certified respirator incorporating T-Melt P to market by 1998 is powerful evidence of their knowledge and intent to deceive.

²¹ In fact, the Willson P95 used T-Melt 50P, which 3M had in its possession but never disclosed to the Examiner.

assertions he made in the specification ... were at least misleadingly incomplete, if not plainly inaccurate”).

3M attempts (Br. 45) to diminish Rousseau’s email to Jones and Hanson, which forwarded the April 22, 1997 email discussing TransWeb’s participation in the Expo, stating: “Notice that *at this time* there was no mention of oil resistant electret filter web.” A6859 (emphasis added). Specifically, 3M argues that this email shows that Jones and Hanson believed that TransWeb was *not* distributing T-Melt *P* at the Expo. The jury and district court rejected this argument; Jones and Hanson knew that TransWeb was distributing “T-Melt” at the Expo, and as the district court observed, there was no evidence that either of them knew there was any other kind of T-Melt. A25 n.21. The district court was entitled to find that the only reasonable inference from these facts is that Hanson and Jones had connected the Racal samples to the Expo, realized T-Melt *P* was invalidating prior art, and were assessing whether there was a paper trail that would establish pre-critical date public use.²²

Second, as discussed *supra*, at 2, 9-10, 33, the district court found that Jones’ denials regarding the 1997 Expo (and assertion that he did not hear of TransWeb

²² Hanson testified that he knew “T-Melt” could not have been the same as the T-Melt he was disclosing to the PTO because TransWeb had signed a confidentiality agreement (with Racal) covering oil-resistant filters in June 1997. A1850-51. However, Hanson admitted that 3M uses confidentiality agreements when discussing products already on the market. A1856.

until 1998) were not credible, and that in fact Jones did know about TransWeb and T-Melt P at the time of the Expo. *See, e.g., Am. Calcar*, 768 F.3d at 1191 (affirming inequitable conduct finding where district court “noted in particular that [patentee’s] positions and [named inventor’s] testimony ... lacked credibility”).

Third, Hanson’s and Jones’ contacts with TransWeb through 3M’s Kurtzahn in the weeks immediately after their connection of T-Melt P to the Expo in December 1998, followed by Hanson’s April 23, 1999 letter to TransWeb’s Ogale, provided further evidence of intent to deceive the PTO. That Jones *and Hanson*—a patent prosecutor who had no prior contact with TransWeb—suddenly began directing Kurtzahn to obtain samples from Ogale evidences a subterfuge that set up an opportunity for Hanson to manufacture the false record that he would later present to the PTO. That letter, “which a non-attorney would read as being about 3M’s interest in doing business with TransWeb in 1999, ... interwove in its verbiage a description of a purported prior confidentiality agreement between [Racal] and TransWeb,” and asked Ogale to confirm its contents. A26. The district court could “[n]ot discern a good faith purpose of the interlineation in that letter.” *Id.*

Fourth, there was substantial evidence that Legare’s testimony that he received T-Melt P samples from TransWeb only following execution of the confidentiality agreement on June 2, 1997 was false and had been coached by

Hanson. The district court found Legare's testimony, like Hanson's and Jones', "not credible in crucial respects...." A28; *see also* A20740-41; A20803. Notably, Legare did not mention the June 1997 confidentiality agreement when he sent the T-Melt P samples to 3M, TransWeb's competitor, A5115; and Legare's provision of the samples to 3M, and 3M's analysis of the material, would have been in direct contravention of the confidentiality agreement had it actually applied. A6943; A9183-84; A9180-81 ¶ 2. Indeed, only when Hanson and Jones began devising their plan to conceal the prior-art status of T-Melt P did anyone at 3M show any interest in the June 1997 confidentiality agreement. Hanson directed Legare to type up his notes from the June 2, 1997 meeting, which were materially altered from the contemporaneous handwritten notes. A27-28. As the district court noted, that Legare materially altered his notes after conferring with Hanson is evidence of the falsity of Legare's account that he obtained T-Melt P samples only after the confidentiality agreement was signed. A28.

Fifth, Hanson's attempt to explain why he waited until November 1, 2000 to disclose T-Melt P to the PTO lacked credibility. A31-32. Specifically, Hanson claimed he delayed filing the IDS because the June 1997 confidentiality agreement *prevented* him from disclosing the T-Melt P sample to the PTO prior to its

expiration in June 2, 2000. A1808-13.²³ But Hanson—who “has prosecuted hundreds of patent applications,” 3M Br. 45—must have realized that an applicant is required to submit material information to the PTO even if it is confidential. Manual of Patent Examining Procedure § 724 (7th ed. July 1998). As the district court concluded, “this was not a credible explanation of the delay strategy,” and “Hanson wilted on the witness stand, head down, and, finally, hostile.” A32; *see also* A20795-96. That Hanson was delaying for an improper purpose is the only reasonable inference from this evidence. *See, e.g., Apotex*, 763 F.3d at 1362 (deceptive intent was single most reasonable inference that could be drawn from the evidence where “conduct evidences a pattern of lack of candor”).

Finally, Hanson’s intent to deceive is confirmed by his efforts to conceal the fraud by requesting that the Examiner expunge the false and misleading IDS from the record after considering it. A9177. Fortunately, the Examiner denied that request. A9231.

III. THE DISTRICT COURT CORRECTLY DENIED 3M’S JMOL MOTION ON TRANSWEB’S *WALKER PROCESS* CLAIM

To establish *Walker Process* antitrust liability of a patentee for asserting a fraudulently-procured patent, a plaintiff must prove: (1) that the patentee “procured the relevant patent by knowing and willful fraud on the PTO”; and (2) “all the

²³ TransWeb does not contend that Hanson’s delay in disclosing T-Melt P was, in itself, a breach of his duty of candor. Rather, Hanson’s implausible after-the-fact explanations for his delay evidence his intent to deceive.

elements otherwise necessary to establish a Sherman Act monopolization charge.” *Ritz Camera & Image, LLC v. SanDisk Corp.*, 700 F.3d 503, 506 (Fed. Cir. 2012). The jury concluded that 3M sought to enforce fraudulently-obtained patents against TransWeb in an attempt to monopolize at least one relevant market and that TransWeb suffered resultant damages. Abundant evidence supported the jury’s verdict in favor of TransWeb.

A. Standard Of Review

This Court applies the same standard as the district court, which recognizes that JMOL is a “sparingly invoked remedy” and should be “granted only if, viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there is insufficient evidence from which a jury could reasonably find liability.” *Marra v. Philadelphia Hous. Auth.*, 497 F.3d 286, 301 (3d Cir. 2007) (internal quotation marks omitted).

B. The Jury’s *Walker Process* Finding Is Supported By The Same Evidence Supporting The District Court’s Inequitable Conduct Determination

3M does not meaningfully argue that the materiality and intent requirements for inequitable conduct are different from those requirements for a *Walker Process* claim, and courts have concluded that they are generally “coextensive.” *E.g.*, *Metris USA, Inc. v. Faro Techs., Inc.*, 882 F. Supp. 2d 160, 174 (D. Mass. 2011). Thus, the same evidence that supports the district court’s and jury’s (advisory)

determination on TransWeb's inequitable conduct defense supports the jury's finding of *Walker Process* fraud.

C. Ample Evidence Supports The Jury's Finding That There Was A Dangerous Probability 3M Would Monopolize One Or More Relevant Markets If Its Scheme Succeeded

At trial, expert economist Dr. Bradley Reiff testified that 3M's assertion of fraudulently-obtained patents against TransWeb created a dangerous probability that 3M would, were its plan successful, monopolize two relevant markets: (1) an upstream product market for fluorinated polymeric filter material; and (2) a downstream geographic market for NIOSH-certified P&R respirators in the United States. A2218-20; A2223-26. With respect to the market for fluorinated polymeric filter material, the elimination of TransWeb—the *only* non-3M producer of plasma-fluorinated polymeric filter material for use by manufacturers of respirators—would give 3M a total monopoly. A1315; A2131. As to the downstream market for NIOSH-certified P&R respirators, Dr. Reiff testified that 3M's 60-66% market share, which already allowed it to enjoy a 78-86% profit margin on respirators, would increase to approximately 78% and allow it to increase prices. A2247-52. 3M presented no expert testimony in rebuttal. 3M now challenges both relevant market definitions, but substantial evidence supported the jury's factual findings.

1. The Upstream Product Market

“The outer boundaries of a relevant [product] market are determined by reasonable interchangeability of use....” *Queen City Pizza, Inc. v. Domino’s Pizza, Inc.*, 124 F.3d 430, 437 (3d Cir. 1997) (citations and internal quotation marks omitted). “Factors to be considered include price, use, and qualities.” *Tunis Bros. Co. v. Ford Motor Co.*, 952 F.2d 715, 722 (3d Cir. 1991) (citation omitted). “[T]he determination of a relevant product market ... is a highly factual one best allocated to the trier of fact.” *Fineman v. Armstrong World Indus., Inc.*, 980 F.2d 171, 199 (3d Cir. 1992) (citation omitted); *see also IGT v. Alliance Gaming Corp.*, 702 F.3d 1338, 1344 (Fed. Cir. 2012).

3M incorrectly argues that “it is impossible to conclude that fluorinated polymeric media have *no* substitutes in the upstream market.” Br. 54 (emphasis added). The question is not whether there are no substitutes, but whether there are no *reasonably-interchangeable* substitutes. *Queen City Pizza*, 124 F.3d at 437. The jury heard ample evidence that there are no reasonably-interchangeable substitutes for fluorinated polymeric filter material, and thus that the market for such material is an appropriate relevant product market.

Dr. Reiff testified that his analysis of the upstream market confirmed that fluorinated polymeric filter material is a distinct product market because the downstream market for NIOSH P&R respirators is highly differentiated; to make a

respirator with high breathability and high filtration efficiency, a respirator manufacturer *must* use fluorinated polymeric material (rather than a material like fiberglass). A2233-35. Thus, the demand for fluorinated polymeric material is driven by demand in the downstream market for high-performing respirators. *Id.* Dr. Reiff's conclusion was supported by a SSNIP (Small but Significant Nontransitory Increase in Price) analysis, which confirmed that a 5% increase in the price of fluorinated polymeric material would not cause manufacturers to shift production away from high-performance respirators that can be made only using such material. A2226-30; A2233-37.

Buttressing Dr. Reiff's opinion, other testimony and documents confirmed that, although NIOSH sets minimum standards for breathability, respirators vary widely in this respect; some respirators considerably exceed the minimum standards, while others barely meet them. A1123-25. Of all filter types, fluorinated polymeric material has the best combination of high breathability and high filtration efficiency. A2166; A5401. Moreover, fluorinated polymeric filters last longer, reducing costs to purchasers. A2142-43; A2280-81.

Indeed, 3M's own surveys indicate that consumers will pay more for the higher breathability and longer service life that respirators using fluorinated polymeric material provide. A5401. The Third Circuit has found such evidence sufficient to define a relevant product market. *E.g., Fineman*, 980 F.2d at 199

(“The strongest evidence of a resilient-only [floor-covering] product market comes in the form of an Armstrong manual that touts the unique cushioning and spring-back characteristics of resilient as opposed to all other hard surface floor coverings.”).²⁴

2. The Downstream Geographic Market For Respirators

“The geographic scope of a relevant product market is a question of fact to be determined in the context of each case in acknowledgement of the commercial realities of the industry being considered.” *Gordon v. Lewistown Hosp.*, 423 F.3d 184, 212 (3d Cir. 2005). “The relevant geographic market is the area in which a potential buyer may rationally look for the goods or services he or she seeks.” *Tunis Bros.*, 952 F.2d at 726. “Consequently, the geographic market is not comprised of the region in which the seller attempts to *sell* its product, but rather is

²⁴ 3M’s authorities (Br. 52-56) are inapposite. In *Unitherm Food Systems, Inc. v. Swift-Eckrich, Inc.*, 375 F.3d 1341, 1364-65 (Fed. Cir. 2004), the plaintiff’s proposed market was so narrowly defined that the plaintiff’s expert admitted that no actual transaction had ever occurred in that market. In *DSM Desotech Inc. v. 3D Sys. Corp.*, 749 F.3d 1332, 1341-42, 1344-46 (Fed. Cir. 2014), the plaintiff’s SSNIP analysis, as performed, was “questionable” and its own documents described other technologies as substitutes, unlike here where 3M’s documents recognize the material superiority of fluorinated polymeric filters. Similarly, in *Golan v. Pingel Enterprise, Inc.*, 310 F.3d 1360, 1369 (Fed. Cir. 2002), the plaintiff failed to introduce *any* evidence that less-expensive and lower-performing fuel valves were not interchangeable with “high end after-market motorcycle fuel valve[s]”; here, substantial evidence demonstrated that fluorinated polymeric filters are not interchangeable with other filters.

comprised of the area where his customers would look to *buy* such a product.” *Id.* (emphasis added).

In arguing (Br. 56-58) that “none of the evidence” supported the United States as the relevant geographic market for NIOSH-certified P&R respirators, 3M again ignores important evidence. U.S. employers purchase P&R respirators to comply with U.S. regulations established by NIOSH and the Occupational Safety & Health Administration (OSHA), a U.S. agency. The U.S. regulatory scheme is a commercial reality the jury was entitled to consider. Additional evidence, including 3M’s own documents dividing geographic markets into the United States and other regions, A5413; A5516-17; A15016, further supports this geographic market definition.

Although 3M contends (Br. 56-57) that nothing prohibits a foreign supplier from obtaining NIOSH certification of its respirators, this speculation is not a reason to expand the relevant geographic market definition beyond the United States, particularly where, as here, regulatory requirements would prevent other international sellers from *immediately* entering the U.S. market if 3M raised prices. *E.g., E.I. du Pont de Nemours & Co. v. Kolon Indus., Inc.*, 637 F.3d 435, 442-47 (4th Cir. 2011) (in defining relevant geographic market, plaintiffs are not required to include distant suppliers without regard to whether consumers can predictably turn to those suppliers); H. Hovenkamp, *Federal Antitrust Policy: The Law of*

Competition and Its Practice § 3.6 (4th ed. 2011) (relevant geographic market is area where consumers could quickly seek alternate suppliers). In any event, any existing sales of P&R respirators manufactured by foreign firms were included in the total respirator sales Dr. Reiff considered, and he still concluded there was a dangerous probability that 3M would obtain a monopoly in the downstream U.S. market for P&R respirators if TransWeb were eliminated. A2247-52.²⁵ The jury's verdict was amply supported by substantial evidence of the relevant markets and should not be disturbed.

D. 3M's Attack On The Jury's Damages Award Conflates Antitrust Damages With Antitrust Injury

The jury found that TransWeb was entitled to recover the legal fees it incurred defending 3M's attempt to enforce its fraudulently-obtained patents against TransWeb. A219. 3M urges (Br. 59-61) this Court to hold that these fees are not allowable antitrust damages, but its argument is premised on an erroneous conflation of antitrust *injury* and antitrust *damages*.

To establish antitrust *injury*, a plaintiff must establish that there would be some harm to competition—rather than simply harm to the plaintiff—if the alleged anticompetitive scheme succeeded. *Multiflex, Inc. v. Samuel Moore & Co.*, 709

²⁵ Although 3M raises various complaints (Br. 58-59 n.12) about Dr. Reiff's assumptions and calculations, these issues go to weight rather than admissibility and the jury was entitled to reject them. *Cf.* A300-305 (denying 3M's *Daubert* motion).

F.2d 980, 994 (5th Cir. 1983). TransWeb did so, as explained above, by adducing sufficient evidence for the jury to find that there was no reasonable alternative (other than TransWeb) to 3M in the fluorinated polymeric filter material market and that 3M stood to obtain a monopoly position in the downstream U.S. market for high-performing respirators. In the context of an attempted monopolization claim such as that here, there need not be any actual harm to competition because the anticompetitive scheme has, by definition, not succeeded; antitrust injury is established if harm to competition would have occurred if the scheme had succeeded. *See id.*

Once such potential antitrust injury is established, the antitrust plaintiff's *damages* is a separate question that appropriately takes account of the unique harm suffered by the plaintiff due to the defendant's attempted monopolization. *Rossi v. Standard Roofing, Inc.*, 156 F.3d 452, 483 (3d Cir. 1998) (proof required for antitrust *damages* is whether “*some* damage flow[s]” from the anticompetitive conduct) (emphasis in original) (citation and internal quotation marks omitted). And courts have found that the expense of defending a monopoly-seeking lawsuit qualifies as damage that “flows” from such conduct. *Handgards, Inc. v. Ethicon, Inc.*, 601 F.2d 986, 997 (9th Cir. 1979) (“In a suit alleging antitrust injury based upon a bad faith prosecution theory it is obvious that the costs incurred in defense of the prior patent infringement suit are an injury which ‘flows’ from the antitrust

wrong.”); *Kearney & Trecker Corp. v. Cincinnati Milacron, Inc.*, 562 F.2d 365, 374 (6th Cir. 1977) (“When the antitrust violations are causally connected to the infringement action it is permissible to include the expenses of defending that action in the award of damages.”); *Dairy Foods, Inc. v. Dairy Maid Prods. Coop.*, 297 F.2d 805, 808-10 (7th Cir. 1961) (being forced to choose between fighting an anticompetitive lawsuit or accepting a burdensome settlement is itself antitrust injury, and, therefore, “cost[s] and expense[s] of defending such an infringement suit” flow from the antitrust injury and are collectible damages). So too here.²⁶

IV. THE DISTRICT COURT CORRECTLY DENIED 3M’S JMOL MOTION REGARDING INVALIDITY

If this Court affirms the district court’s determination that 3M committed inequitable conduct, *see* Point II, *supra*, 3M’s asserted patents are unenforceable and this Court need not address invalidity, an independent bar to enforceability.²⁷

In any event, there is no basis to disturb the jury’s finding that claims 31 and 57 of

²⁶ The unpublished district-court cases cited by 3M (Br. 60) for the proposition that “[c]ourts have . . . held that litigation fees cannot be recovered as antitrust damages in the *Walker Process* context absent a showing that those fees affected competition,” Br. 59-60, considered antitrust *injury*, not antitrust *damages*, and do not aid 3M. As explained in text, TransWeb demonstrated that there would have been an effect on competition (*i.e.*, antitrust injury) had 3M’s assertion of its patents succeeded, and only having done so sought damages based on the attorneys’ fees that TransWeb incurred in defending 3M’s monopoly-seeking lawsuit.

²⁷ Although the inequitable conduct and *Walker Process* determinations are supported by the jury’s obviousness verdict, they do not depend on it because the but-for materiality of the fraud appears on the face of the prosecution history.

the ‘458 patent were invalid as obvious in light of the combination of T-Melt P and the ‘507 hydrocharging patent.

A claim is invalid as obvious “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. .” 35 U.S.C. § 103 (pre-America Invents Act).

3M contends (Br. 28-42) this Court must set aside the jury’s verdict of invalidity because there was insufficient evidence to find that (1) T-Melt P was prior art; and (2) it would have been obvious to a person of ordinary skill in the art to combine T-Melt P and the ‘507 hydrocharging patent to achieve the inventions described by those claims. Neither argument has merit.

A. The Jury Was Entitled To Find That T-Melt P Was Prior Art

3M’s attack on the sufficiency of the evidence that T-Melt P was prior art is based entirely on its claim that Ogale’s testimony regarding pre-critical date public use of T-Melt P was not sufficiently corroborated. As shown in Point I, *supra*, Ogale’s testimony was amply corroborated.

In addition to public use, and contrary to 3M’s argument (Br. 38 n.6), the jury was also entitled to find that T-Melt P was prior art because the July 1, 1997 letter to Gerson, A5150, was a pre-critical date commercial offer for sale of an

invention that was ready for patenting, thus triggering 35 U.S.C. § 102(b)'s on-sale bar. *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998). Determining whether a communication constitutes a commercial offer for sale “requires looking closely at the language of the proposal itself” to determine the offeror’s intent. *Grp. One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1048 (Fed. Cir. 2001); *see also Scaltech, Inc. v. Retec/Tetra, LLC*, 269 F.3d 1321, 1328 (Fed. Cir. 2001) (offer need not be accepted to trigger on-sale bar). TransWeb’s letter to Gerson offered two sets of “real commercial prices” per square yard, one representing the price during the period TransWeb was outsourcing the fluorination and one representing the price once TransWeb began in-house fluorination, and assumed a minimum purchase commitment of 2,500,000 square yards, a realistic quantity for a company of Gerson’s size. A1220-21. Ogale’s testimony confirmed that TransWeb was capable of selling the listed materials at the stated prices and that no further terms were needed. *Id.* The jury was entitled to credit this testimony and the letter itself to find that the letter was a pre-critical date offer for sale.

B. The Jury Was Entitled To Find That It Was Obvious To Hydrocharge Plasma-Fluorinated Filter Material

In challenging the jury’s finding of obviousness, 3M ignores the evidence from which the jury could properly conclude that it would have been obvious to a person having ordinary skill in the art to “hydrocharge” plasma-fluorinated web. *First*, 3M fails to note that, during the prosecution of the ‘175 patent, the Examiner

concluded that it would be obvious to combine T-Melt 30P with the ‘507 hydrocharging patent, A9189, and 3M did not challenge this conclusion. A9194-96. *Second*, 3M ignores Dr. Edward Funk’s expert testimony that it would have been obvious to combine T-Melt 30P and the ‘507 hydrocharging patent in order to create a better electret because hydrocharging was a well-known method of placing a more effective charge on an electret.²⁸ A2071-81.

Instead of addressing this evidence, 3M argues that hydrocharging plasma-fluorinated material was not obvious because it yielded unexpected results and because the hydrocharging patent “taught away” from the combination. However, 3M disregards several flaws in its own arguments and evidence.

For example, 3M argues (Br. 41) that the combination’s results were unexpected because it did not occur to TransWeb’s Ogale to “wet-charge” plasma-fluorinated material until 1999. But this argument mistakenly assumes that TransWeb’s rinsing process—which involves dipping the plasma-fluorinated material in a series of alcohol and water baths and then drying it—actually imparts a charge; in fact, the rinsing process stabilizes the existing charge. A1259-60; A1335-44; A1470-75; A5379. Ogale’s “failure” to experiment with “hydrocharging” at any point in time can be explained by the fact that

²⁸ The evidence also established it would have been obvious to combine T-Melt P with the ‘507 hydrocharging patent to achieve the higher metrics in claim 57 because the ‘507 patent’s specification disclosed such high metrics. A5072.

hydrocharging was covered by the ‘507 patent, A5076, and thus has little if any probative value.

Further, 3M argues (Br. 40-42) that the ‘507 patent “teaches away” from the combination because (1) it does not suggest hydrocharging plasma-fluorinated material; and (2) cautions against hydrocharging ultraviolet-irradiated material and, 3M contends, plasma fluorination exposes the web to ultraviolet radiation. Neither argument has merit. *First*, the mere fact that the ‘507 patent does not disclose or suggest hydrocharging plasma-fluorinated (as opposed to other) material does not, as 3M suggests, teach away from the combination. *DyStar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1364 (Fed. Cir. 2006). *Second*, there was evidence from which the jury could conclude that plasma-fluorinated material is not exposed to significant amounts of ultraviolet radiation that could destroy the electrostatic charge. Although 3M selectively cites (Br. 40-41) Dr. Funk’s testimony to support its argument, 3M ignores his testimony that although there was “possibly” some ultraviolet radiation in the plasma chamber, it is “really a secondary effect” because “it’s mainly the ionic fragments” at work in the plasma chamber. A2109.

Finally, 3M complains (Br. 40, 42) that the district court did not analyze the factors in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), in denying 3M’s JMOL

motion.²⁹ However, there is no dispute that the court properly instructed the jury on those factors. A142-47. “Because obviousness is a mixed question of law and fact, [this Court] first presume[s] that the jury resolved the underlying factual disputes in favor of the verdict [] and leave[s] those presumed findings undisturbed if they are supported by substantial evidence.” *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1356-57 (Fed. Cir. 2012) (internal quotation marks omitted). The Court then examines the legal conclusion of obviousness *de novo* to see whether it is correct in light of the presumed jury fact findings. *Id.* Here, as shown above, the jury had ample basis in the evidence to conclude, after consideration of all of the *Graham* factors, that claims 31 and 57 were obvious.

V. THE DISTRICT COURT CORRECTLY DENIED 3M’S JMOL MOTION ON INFRINGEMENT AS MOOT, AND ACTED WITHIN ITS DISCRETION IN DENYING A NEW TRIAL

The district court correctly denied 3M’s JMOL motion seeking to overturn the jury’s verdict of non-infringement as moot because the court’s finding of inequitable conduct and denial of 3M’s JMOL regarding invalidity left the patent claims unenforceable and invalid.

The district court also acted within its broad discretion in denying a new trial. “Considered ‘extraordinary relief,’ ... a new trial should be granted only if

²⁹ 3M did not raise this argument in a motion for reconsideration or in the motion for a new trial it filed after the district court denied its JMOL motion. A20971-72; A20978-80.

the great weight of the evidence cuts against the verdict and ‘where a miscarriage of justice would result if the verdict were to stand....’” *Leader Techs.*, 678 F.3d at 1305 (quoting *Marra*, 497 F.3d at 309 n.18; *Sheridan v. E.I. DuPont de Nemours & Co.*, 100 F.3d 1061, 1076 (3d Cir. 1996) (en banc)); see also *Foster v. Nat’l Fuel Gas Co.*, 316 F.3d 424, 430-31 (3d Cir. 2003) (new trial is “proper only when the record shows that the jury’s verdict resulted in a miscarriage of justice or where the verdict, on the record, cries out to be overturned or shocks [the Court’s] conscience”) (internal quotation marks omitted). The same evidence that supports the jury’s verdict confirms that the district court did not abuse its discretion in denying 3M’s motion for a new trial.

CONCLUSION

The judgment should be affirmed.

DATED: January 29, 2015

Respectfully submitted,

QUINN EMANUEL URQUHART &
SULLIVAN, LLP

By: /s/ Michael E. Williams

Michael E. Williams

Harold A. Barza

Valerie Roddy

QUINN EMANUEL URQUHART

& SULLIVAN, LLP

865 South Figueroa St., 10th Floor

Los Angeles, CA 90017

(213) 443-3000

Sanford I. Weisburst

QUINN EMANUEL URQUHART

& SULLIVAN, LLP

51 Madison Ave., 22nd Floor

New York, NY 10010

(212) 849-7000

Philip C. Sternhell

QUINN EMANUEL URQUHART

& SULLIVAN, LLP

777 Sixth St., NW, 11th Floor

Washington, DC 20001-3706

(202) 538-8000

*Attorneys for Plaintiff-Appellee
TransWeb, LLC*

CERTIFICATE OF SERVICE

I hereby certify that on January 29, 2015, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the appellate CM/ECF system.

Participants in the case who are registered CM/ECF users will be served by the appellate CM/ECF system.

Dated: January 29, 2015

By /s/ Michael E. Williams

Michael E. Williams

CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitations of Federal Rule of Appellate Procedure 32(a)(7)(B). The brief contains 13,911 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Circuit Rule 32(b).

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Dated: January 29, 2015

By /s/ Michael E. Williams

Michael E. Williams

Attorneys for Plaintiff-Appellee

TransWeb, LLC